

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-2. (Previously Cancelled)

3. (Cancelled Herein)

4. (Previously Cancelled)

5.-20. (Cancelled Herein)

21. (Previously Amended) A method of ranking the immune response of a test animal within a population of animals under stress comprising:

(a) immunizing the animals with at least one antigen at least once before the onset of the stress;

(b) measuring the antibody response of the animals to the at least one antigen at least once before the onset of the stress and at least once during the stress; and

(c) calculating a mathematical index of the antibody response, wherein the mathematical index is:  $y$  = primary antibody response, wherein

(i)  $y$  is the immune response; and

(ii) the primary response is the difference in antibody quantity at a first time point before the onset of stress and a second time point during the stress, wherein the animal is immunized at the first time point before the onset of stress;

wherein a test animal having a  $y$  value greater than about one standard deviation above the average of the  $y$  value for the population is a high immune responder.

22.-24. (Cancelled Herein)

Appl. No. 09/899,552  
Response dated February 16, 2006  
Reply to Office Action of August 24, 2006

25.-52. (Previously Cancelled)